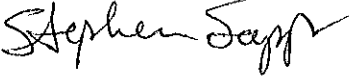




**MEMORANDUM**

**To:** Donna E. Shalala, President

**From:** Stephen Sapp  
Chair, Faculty Senate 

**Date:** September 26, 2007

**Subject:** Faculty Senate Legislation #2007-23(B) – BSIT Degree Program Name Change Proposal

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The Faculty Senate, at its March 28, 2007 meeting, voted unanimously to approve the BSIT Degree Program Name Change

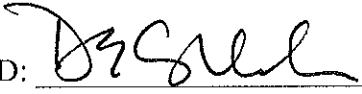
This legislation is now forwarded to you for your action.

SS/ib

cc: Thomas LeBlanc, Executive Vice President and Provost  
David J. Birnbach, Vice Provost for University Administration and Faculty Affairs

Faculty Senate Legislation #2007-23(B) – BSIT Degree Program Name Change Proposal

**PRESIDENT'S RESPONSE**

APPROVED:  DATE: 10/1/07  
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: Dean - College of Engineering

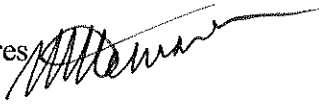
EFFECTIVE DATE OF LEGISLATION: \_\_\_\_\_  
(if other than June 1 next following)

NOT APPROVED AND REFERRED TO: \_\_\_\_\_

REMARKS (IF NOT APPROVED): \_\_\_\_\_



**MEMORANDUM**

DATE: January 26, 2007  
TO: Dr. Stephen Sapp, Chair, Faculty Senate  
FROM: Dr. M. Lewis Temeares   
RE: BSIT Degree Program Name Change Proposal

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The College of Engineering Faculty approved a proposal to change the name of the Bachelor of Science in Information Technology Degree/Program to Bachelor of Science in Information Technology and Software Engineering on January 25, 2007. This proposed change was submitted by the Department of Electrical and Computer Engineering, and has also been approved by our College Council.

Attached is the proposal, which states why this name change is necessary for the continued success of the degree program.

I fully endorse this proposal and hope that the Faculty Senate will expedite its review and approval. Please let me know if you need any more information. Thank you for your assistance.

MLT:lb  
Attachment

cc: Dr. James Modestino, Chair, Department of Electrical and Computer Engineering  
Dr. Peter Tarjan, Professor of Biomedical Engineering and Faculty Senator

College of Engineering  
Office of the Dean  
P.O. Box 248294  
Coral Gables, Florida 33124-0620  
305-284-2404  
Fax: 305-284-3815  
<http://www.eng.miami.edu>



## MEMORANDUM

To: Professor Stephen Sapp, Chair Faculty Senate

CC: C. Alvarez, K. Yacoub, M. Kabuka, M.L. Temares, P.Tarjan

From: J. W. Modestino, Chair ECE Department *JWM*

Date: February 9, 2007

Re: BSIT Degree Program Name Change Proposal

At a meeting in Fall'2006, the faculty of the Electrical and Computer Engineering (ECE) Department approved the name change of one of its degree programs from *Bachelor of Science in Information Technology* to *Bachelor of Science in Information Technology and Software Engineering*. The reasons underlying this requested change were carefully detailed in the proposal presently under consideration by the Faculty Senate. Basically, the reasons were motivated by the anticipated difficulties in obtaining accreditation under the present name, a need to update and unify the curriculum of the existing degree program and the desire to provide a name for the program which better reflected the program orientation and content which would lead to improved job placement prospects for graduates of this program.

The proposal approved by the ECE faculty was subsequently forwarded to the College of Engineering (CoE) where it was approved, first by the CoE Council at a meeting in Fall'2006, and then by a vote of the entire CoE faculty in Spring'2007. This is the same proposal presently under consideration by the Faculty Senate.

Depending on individual schedules, either Professor Kabuka, Chair of the ECE Computer Engineering Curriculum, or I will be prepared to present this proposal to the General Welfare Committee as well as to the Faculty Senate.

**RE:** Change of name of the degree from *Bachelor of Science in Information Technology* to *Bachelor of Science in Information Technology and Software Engineering*

The Department of Electrical and Computer Engineering (ECE) proposes to change the name of the degree in Information Technology from *Bachelor of Science in Information Technology* to *Bachelor of Science in Information Technology and Software Engineering*. The faculty has identified the listed reasons why this change is necessary for the continued success of the program.

**1. Accreditation<sup>1</sup>:**

- a. ECE plans to gain accreditation for the Information Technology degree program under the Engineering Programs of the Accreditation Board of Engineering and Technology (ABET), the primary engineering accreditation board, as are the rest of ECE's degrees. ECE has identified the ABET Engineering Programs as the applicable accreditation path based on the structure of the Information Technology program and its emphasis on engineering, math and science criteria.
- b. Since ABET does not have an accreditation path for Information Technology under its Engineering Programs criteria, nor does the degree fit any of the other accreditation areas, the faculty have had to determine the best path under which accreditation can be achieved.
- c. ABET does accredit Software Engineering under the Engineering Programs. The Information Technology degree provides two options, one applicable to Information Technology in general and one with a specialization in Software Engineering. The faculty has determined that Software Engineering alone is not sufficient to cover the depth and scope of the offered degree and thus proposes to incorporate the two and change the name of the degree to *Information Technology and Software Engineering* which will be appropriate for ABET accreditation under the Engineering Programs criteria.

**2. Curricular Structure:**

- a. The current Information Technology curriculum is geared towards producing students with a solid engineering background and with the "knowledge of mathematics, science, and engineering, and the skills needed to analyze computer and information technology applications and requirements, and to plan, design, and develop successful solutions<sup>2</sup>." This curriculum has an emphasis on the use of engineering practices and technology in creating solutions for today's increasingly evolving technology intensive environment, which makes it an Engineering degree.
- b. The program itself offers two options, one in Information Technology in general which offers the students the flexibility to tailor the program to

<sup>1</sup> ABET Engineering Programs criteria 2006/2007, [www.abet.org](http://www.abet.org)

<sup>2</sup> IT Program Educational Objectives

their goals, which makes the degree more relevant for a wider range of careers. The second option with a specialization in Software Engineering, provides a sound background in engineering (common to both options), but then provides the specialization in the Software Engineering field needed by graduates of such a degree.

- c. This emphasis on scope and flexibility, while also providing the structure needed for a specialization, warrants the need for this to be reflected in the overall name of the degree.

### 3. Job Market:

- a. The US Department of Labor has reported that software based development and management occupations are expected to be the fastest growing occupations through 2012 (with graduates of engineering programs consistently earning higher salaries than those from computer science programs<sup>3</sup>).
- b. The rate of growth of software systems has far outpaced the growth of hardware systems in recent years. With this growing market, there is a need to produce engineers who have the formal training in sound engineering practices, while at the same time are able to work in team environments on large scale, complex software systems. This program prepares the student for the demands of this exciting field with a strong emphasis on hands-on training and must be reflected in the title of the degree program as to Information Technology and Software Engineering.
- c. Due to the broad definition of Information Technology, it is necessary to ensure that the degree reflect the engineering scope and areas that are being emphasized in the program. This helps the students after graduation in clearly identifying the background they have attained for the purpose of earning this degree and opens up opportunities for them along a variety of career paths.

Addendum: As the Degree name is changed from BSIT to BSIT&SWE, it will also imply that the Program Title will also change from Information Technology to Information Technology and Software Engineering

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<sup>3</sup> U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook 2004-05